CT TRAIL CONSTRUCTION SPECIFICATIONS

A. SCOPE:

A.1. The Contractor shall provide all goods or services and deliverables as required, described, and detailed below and shall meet all service and delivery timelines as specified by this Contract.

A.2. All trail construction will meet the specifications and standards established in the American Trails guide for Sustainable Trail Development (https://www.americantrails.org/images/documents/Sustainable-TrailDevelopment-Guidelines.PDF) for full bench trail construction (unless alternative is approved by a designated State Parks representative.)

B.
B.1. The contractor is responsible for providing all trail building tools and transportation. Tools will comply with the standards established in the USDA Trail Construction and Maintenance Notebook 2007 Edition (http://www. fs.fed. us/t d/pubs/pdfpubs/pdf07232806/pdf07232806dpi72.pdf) and the American Trails non-profit organizational website (www.americantrails.org). Trail building machinery will be restricted to electric and gas operated hand tools and mini skid steer systems with a wheel or track width of 42inches or less.

B.2. The trail must be designed to provide a long lasting, sustainable, back country trail that can be traversed by novice hikers with moderate effort. Due to the nature of the terrain and location of the project, the trail section will not be designated as an Americans with Disabilities (ADA) compliant trail. The trail will be designed for hiking and foot traffic only.

B.3. Prior to the start of construction, the State will provide the contractor with a daily contact list for the designated park staff member from the Cumberland Trail Scenic Park. The list will identify the points of contact for issues, questions, and design modifications/exceptions.

B.4. The trail corridor includes the trail tread, back slope, out slope, and ceiling above the trail tread. The trail corridor should be cleared by removing small trees and limbs to open a "6 foot-wide by 8 foot-tall box". Trees with diameter of 4 inches including roots system will be removed if in trail tread. Trees 4 inches in diameter in trail corridor but not in trail tread can be cut down to ground. Trees alive or dead with diameter greater than 4 inches cannot be removed unless authorized for the purpose of moving machinery for trail construction. The removal of these trees must be approved by the designated park staff member.

B.5. The trail tread will be a minimum of 30 inches with a full or solid bench. Fill material will not be used to gain trail width. In areas where rock and trees cannot be removed, a minimum 18 inches of trail tread is acceptable for up to 3

feet of the trail length and must maintain the same trail grade.
B.6. The trail tread must have an out slope of 3% - 6% to ensure proper drainage.
Roots and rock that pose a tripping hazard will be fully removed. The trail back
slope should be at an angle that resembles the slope of the terrain.

Bidders Please Note: Mileage and Footage calculations are approximate based on field staff calculations. These are the best representation of numbers in an approximate fashion based on usage of Consumer Grade GPS equipment. As GIS parameters (latitude and longitude) vary slightly based on satellite readings at any given time – it will be the responsibility of the bidder to verify the numbers of mileage/footage to their satisfaction before bidding.

B.7. Piney River Section 3

B.7.a. Trail Description (Please See Attached Excel Spreadsheet for Detailed Section Breakdown for Pt to Pt Distances)

Point 39 to Point 40. Beginning below the Carsonite post marking the AFM easement, walkthrough three will start with switchbacks descending to a waterfall. The beginning of the switchbacks will be clearing of trail bench to mineral soil and end with little rock work. Rock steps will be needed at end of switchbacks descending to waterfall.
Point 41 to Point 42. This section of trail begins and ends behind the waterfall. Rock work and trail bench clearing will be required. Majority of this section will be rock work.
Point 43 to Point 44. Trail begins at the end of behind the waterfall. Here starts heavy rock work with minimal trail bench clearing in-between.
Point 44 to Point 47. Trail section begins at switchback. The Points of this section mark four needed switchbacks. These switchbacks require trail bench clearing with little to no rockwork.
Point 47 to Point 48. This segment of trail starts at ending of switchback. Segment requires trail bench clearing with minimal rock work.
Point 48 to Point 49. Trail begins with rocky terrain requiring moving and puzzling of rocks together to create trail through a rock field.
Point 49 to Point 50. Trail continues through rocky terrain requiring moving and puzzling of rocks to create trail. Small drains present requires rock work to stabilize crossings.
Point 50 to Point 51. The beginning and end of this section will include heavy rock work on steep terrain. Small drain crossings are present on this section and require rockwork to stabilize crossings.
Point 51 to Point 52. Trail segment starts at the ending of rock work. Segment requires trail bench clearing on steep terrain. Rock stairs must be constructed at the end of this segment.
Point 52 to Point 53. Trail segment work includes traditional bench clearing on steep terrain. Segment will end at construction site for rock stairs.
Point 53 to Point 54. Trail begins with rock stairs that must be constructed. The remainder of this trail requires trail bench clearing through thick mountain laurel.
Point 54 to Point 55. Trail section will include heavy rock though a rock field.
Point 55 to Point 56. Rock work continued. Trail section requires rock work with sporadic tread bench clearing.
Point 56 to Point 57. Rock work continued. Trail section requires rock work with sporadic tread bench clearing.
Point 57 to Point 58. This section requires light rock work with tread bench clearing.
Point 58 to Point 59. Trail work must begin with light rock work and continues with heavy rock work.

Point 59 to Point 60. Trail begins at a drainage that will need a rock crossing. Trail bench clearing to mineral soil will be needed end of section.
Point 60 to Point 61. This section will include challenging rock work.
Point 61 to Point 62. Trail segment includes trail bench clearing with removal of underbrush.
Point 62 to Point 63. This section of construction is comprised of a short section of rock work before trail descent.
Point 63 to Point 64. This construction section starts with the trail descending. Trail bench clearing required.
Point 64 to Point 65. Trail descends with trail bench clearing continued on this section.
Point 65 to Point 66. Section begins at end of trail descent. This section will require heavy rock work.
Point 66 to Point 67. Begins at end of heavy rock work. Trail will continue with clearing of trail bench on flat terrain.
Point 67 to Point 68. Trail turns uphill at start of this section. Ends at first switchback. Trail will need to be cut into side slope.
Point 68 to Point 73. Section starts at first switchback. Six switchbacks in total with this section and will need trail bench clearing into side slope.
Point 73 to Point 74. Trail ascent ends and transitions into flat terrain in open hardwoods. Trail bench clearing will be needed.
Point 74 to Point 75. Flat terrain continues until it ends as trail descends into a drainage. Trail bench clearing will be needed.
Point 75 to Point 76. Trail descends into drainage where a bridge will be needed.
Point 76 to Point 77. Trail continues with flat terrain from large drainage with bench clearing needed.
Point 77 to Point 78. Flat terrain with bench clearing continued on this section. Ends at a roadbed.
Point 78 to Point 79. Trail begins on an old roadbed and continues until it leaves roadbed going uphill. Multiple trees down and thick brush along roadbed will require minimal clearing.
Point 79 to Point 80. Trail leaves roadbed and continues through extremely thick underbrush.
Point 80 to Point 81. Trail section continues through extremely thick underbrush and ends at beginning of a roadbed.
Point 81 to Point 82. Trail in this area is on an old roadbed that will need improvement. Section will end at a small drain.
Point 82 to Point 83. Trail continues on old roadbed. A small drain is present on this section. Section will begin and end at a small drain.
Point 83 to Point 84. Trail continues on old roadbed. A small drain is present on this section. Section will begin and end at a small drain.
Point 84 to Point 85. Section will begin at a small drain. Trail continues to end of old roadbed. Start of rock work.
Point 85 to Point 86. Trail begins with rocky terrain requiring trail to be built though rock field. This section ends at end of rock work.
Point 86 to Point 87. Section begins at end of rock work. Trail to be built on side slope though extremely thick brush.
Point 87 to Point 88. Trail continues on side slope with brush thinning out. Section ends at drainage.
Point 88 to Point 89. Begins at drainage. Trail is on steep terrain and will need to be cut into side slope.
Point 89 to Point 90. Trail ascends with steep terrain requiring it to be built into side slope. Section ends at drainage.
Point 90 to Point 91. Trail continued to be built into side slope. Ends at start of rock work.
Point 91 to Point 92. Trail begins with rocky terrain requiring trail to be built though rock field. Section ends at a drainage.

Point 92 to Point 93. Trail begins at drainage and rocky terrain continues until end of section.
Point 93 to Point 94. Trail section is a short build into side slope.
Point 94 to Point 95. Rocky area begins, requiring moving and puzzling of rocks to create trail, section ends at a drainage.
Point 95 to Point 96. Trail begins at drainage. The section requires trail bench clearing, with side slope construction at the end of section.
Point 96 to Point 97. Trail work requires a short section of rock work between side slope build.
Point 97 to Point 98. Tread bench clearing into side slope continued to drainage.
Point 98 to Point 99. Trail section begins and ends at a drain. Tread bench clearing into side slope is required in this section.
Point 99 to Point 100. Tread bench clearing into side slope continued to the beginning of a rock work section.
Point 100 to Point 101. Rock work required at the beginning of this section, requiring moving and puzzling rocks to put trail through.
Point 101 to Point 102. Trail work continues to require rock work throughout this section.
Point 102 to Point 103. Rock work ends and construction transitions to tread bench clearing into side slope.
Point 103 to Point 104. Tread bench clearing into side slope continues to a drainage.
Point 104 to Point 107: Trail Complete (Skip)
Point 107 to Point 110. Trail section crosses roadbed used for access. Rock work continues after crossing roadbed to a small drainage.
Point 110 to Point 111. Rock work continues from small drainage to end at start of tread bench clearing.
Point 111 to Point 112. Section contains tread bench clearing to a drainage.
Point 112 to Point 113. Rock work begins at a drainage and continues to a descending short staircase that will be required in this section.
Point 113 to Point 114. Section begins at short staircase and ends at a descending switch back. Tread bench clearing and sporadic rock work will be required.
Point 114 to Point 115. Section will contain two switchbacks with trail descending into a roadbed. Tread bench clearing and sporadic rock work will be required.
Point 115 to Point 116. Trail segment follows an old roadbed that must be improved. Segment ends at a drainage.
Point 116 to Point 117. Trail continues on old roadbed to main access road.
Point 117 to Point 118. Trail segment follows main access road and ends before leaving road. End of section three.

B.8. Piney River Section 4

B.8.a. Trail Description (Please See Attached Excel Spreadsheet for Detailed Section Breakdown for Pt to Pt Distances)

Point 119 to Point 120. Section four begins on the right of way access roadbed. Trail will need improvement while on roadbed.
Point 120 to Point 121. Trail segment leaves right of way roadbed and continues on an old roadbed. Trailbed on the old road must be improved with rock work required.
Point 121 to Point 122. Trail leaves roadbed and turns uphill. Short section of rock work uphill will be required.

Point 122 to Point 123. Trail section begins and ends on an old rocky roadbed. This trail segment will require rock work and little trail bench clearing.
Point 123 to Point 124. Section contains rock work on very steep terrain with little trail bench clearing.
Point 124 to Point 125. Trail bench clearing is required on this segment. Trail will be built along bluff with very steep terrain. There will be a waterfall at point 125.
Point 125 to Point 126. Trail section will begin at a waterfall. From the waterfall it will continue to be built along a bluff wall on very steep terrain.
Point 126 to Point 127. Rock work continues along steep terrain.
Point 127 to Point 128. Rock work continues along steep terrain.
Point 128 to Point 129. Trail section contains short section of uphill rock work and trail bench clearing.
Point 129 to Point 130. Trail section starts off with rock work on steep terrain. Steep terrain slacks off toward point 130.
Point 130 to Point 131. Trail segment requires heavy rock work through a rock field.
Point 131 to Point 132. Heavy rock work ends. Trail segment has transitioned to trail bench clearing on sandy soil along river.
Point 132 to Point 133. Trail continues along river. This segment begins going uphill slightly then downhill to point 133. At the end of this section the trail will reach a rock wall.
Point 133 to Point 134. Trail section starts off with trail bench clearing on wet ground. Trail construction will transition to rock work atop a rock wall.
Point 134 to Point 135. The trail design turns uphill, away from river. Trail bench clearing on steep terrain will begin. A small drain at end of this section requires some rock work.
Point 136 to Point 136. Trail section begins at small drain. This section requires mostly trail bench clearing. Will end at a large drain at point 122.
Point 136 to Point 137. Trail section begins at large drain. This drain will need a bridge (needs to be inspected for length) but can easily be crossed by contractors and hikers. Rock work begins in this section.
Point 136 to Point 138. Trail segment requires both rock work and trail bench clearing on descending trail.
Point 138 to Point 139. Trail segment requires both rock work and trail bench clearing on top of build old rock wall near river.
Point 139 to Point 140. Trail segment requires both rock work and trail bench clearing on top of build old rock wall near river.
Point 140 to Point 141. Section begins on a rocky roadbed. This section will require puzzling rock work throughout. Rocky roadbed ends on this section.
Point 141 to Point 142. Trail section stays on a roadbed but not rocky. Trail improvement will be needed while traveling roadbed. Trail will leave roadbed at end of this section.
Point 142 to Point 143. Trail section contains flat terrain, wet ground, and drains. Rock steps should be placed across seeps. Section will run alongside river.
Point 143 to Point 144. Trail section contains flat terrain, wet ground, and drains. Rock steps should be placed across seeps. Section will run alongside river.
Point 144 to Point 145. Trail section contains flat terrain, wet ground, and drains. Rock steps should be placed across seeps. Section will run alongside river. Flat terrain ends at end of this section.
Point 145 to Point 146. Trail segment descends along steep terrain. Segment will contain trail bench clearing with sporadic rock work.
Point 146 to Point 147. Trail segment enters an old roadbed and will continue on old roadbed to the end of section four at the Piney Suspension Bridge. Trail must be improved on old roadbed.

C.

Completion Date

All work is to be complete and the Contractor will schedule inspection of all trail work with Justin P. Wilson Cumberland Trail State Park Staff to ensure satisfactory completion by: August 1, 2022